United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/614,189	07/08/2003	Kwan Yong Lim	P68975US0	6329	
136 7	590 01/11/2005		EXAM	INER	
JACOBSON HOLMAN PLLC			VU, DAVID		
400 SEVENTE SUITE 600	I STREET N.W.		ART UNIT	PAPER NUMBER	
WASHINGTO	N, DC 20004		2818		
			DATE MAILED: 01/11/2005	DATE MAILED: 01/11/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)						
,		10/614,189	LIM ET AL.						
	Office Action Summary	Examiner	Art Unit	T					
		DAVID VU	2818						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
1)⊠)⊠ Responsive to communication(s) filed on <u>21 October 2004</u> .								
2a)□	This action is FINAL . 2b) This	is action is non-final.							
3)⊠ Since this application is in condition for allowance except for formal matters, prosecution as to the merit closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.									
Disposition of Claims									
4) Claim(s) 1-14 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 9-14 is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) 1-14 are subject to restriction and/or election requirement.									
Applicati	on Papers								
9) 🗌 -	9)☐ The specification is objected to by the Examiner.								
10) 🔲 🗀	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority u	nder 35 U.S.C. § 119								
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 									
Attachment		_							
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)		view Summary (PTO-413) er No(s)/Mail Date	•					
3) Inform	e of Drattsperson's Patent Drawing Review (P10-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 No(s)/Mail Date	5) Notic	re of Informal Patent Application (Pr	TO-152)					

QUAYLE ACTION

1. This application is in condition for allowance except for the following formal matters:

Election/ Restriction

2. Applicant's election of Species II (figures 4A-4F; Claims 9-14) filed on 10/21/04 is acknowledged. The traverse is on the ground(s) that "the number of species claimed in the present application does not exceed such a reasonable number". This is not found persuasive because the numerous species each include non-obvious variants which would be a burden in both search and examination.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

3. Claim 9 is objected to because of grammatical informality, for example, the phrases "making the high dielectric insulating film and the insulating material layer remained only in an isolation region through an etch process" in page 19, lines 3-5. It is suggested that this limitation be changed to "causing the high dielectric insulating film and the insulating material layer to remain only in an isolation region through an etch process" so as to make it clear as depicted in figure 4B.

Application/Control Number: 10/614,189 Page 3

Art Unit: 2818

4. Claim 9 recites the limitation "the entire semiconductor substrate" in page 19, line 2.

There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

5. The following is an examiner's statement of reason for allowance: None of the references of record teaches or suggests a method of fabricating a semiconductor device, comprising the steps of forming an anti-etch films at the top corners of the device isolation film through reaction of silicon components of the active region layer and the high dielectric insulating film.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D.11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Page 4

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Vu whose telephone number is (571) 272-1798. The examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm. If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shiland

David Vu

January 07, 2005.

David Nelms

Supervisory Patent Examiner Technology Center 2800